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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/523,332	03/10/2000	Akihiko Mochida	P/16-259	5458
7590                    08/23/2007		EXAMINER		
Ostrolenk Faber Gerb & Soffen LLP 1180 Avenue of the Americas New York, NY 10036-8403		WONG, ALLEN C		
		ART UNIT	PAPER NUMBER	
		2621		
		MAIL DATE	DELIVERY MODE	
		08/23/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/523,332	MOCHIDA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Allen Wong	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 July 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,2,4,5,7,9-16,18,20-22 and 37 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1,2,4,5,7,9-16,18 and 20-22 is/are allowed.
- 6) Claim(s) 37 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/2/07 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed 7/2/07 have been fully read and considered but they are not persuasive.

Independent claims 1, 18 and 22, as currently amended, are patentable over the prior art. However, claim 37 is the broadest independent claim, and thus, is rejected as explained below. Dependent claims 2, 4, 5, 7, 9-16, 20 and 21 are patentable by virtue of their dependency to independent claims 1 and 18.

### ***Claim Rejections – 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaiya (5,178,130) and Matumoto (5,434,615).

Regarding claim 37, Kaiya discloses an image apparatus comprising:  
an imaging device having an imaging device for picking up an image of an object  
and generating an image pick-up signal (fig.1, element 4a is the imaging apparatus  
where the imaging device or video scope 2a pickups the optical image and element 5a  
displays or outputs an image pickup signal); and  
a connector electrically connected to the imaging device via an elongate signal  
transmission line (fig.1, note element 4a is connected with element 2a), the connector  
including:

a timing signal generation circuit for generating a periodic timing signal according  
to the type of the imaging device (fig.4, element 33a is the same synchronization circuit  
as element 33a in fig.1, where element 78 is the timing signal generation circuit, and  
note in fig.1, element 31a is interconnected with elements 32a and 33a);

a sampling circuit for sampling the image pick-up signal at a predetermined  
sampling timing according to the timing signal (fig.1, element 32a is within element 4a  
processes and samples the image pick-up signals obtained, wherein element 33a, is  
within element 4a, is used to generate a synchronization signal); and

a phase delay circuit (fig.1, element 33a is a phase adjustment circuit that can be  
used to delay the phase of the timing signal; see col.6, ln.38-52 and fig.9, note element  
64a and 64b are the interchangeably switches that can provide the switching means for  
interchangeable linkage between the endoscopic devices).

Kaiya does not specifically disclose a phase delay circuit for delaying the phase  
of the timing signal by a delay amount according to the length of the signal transmission

line; and an imaging device drive circuit for generating a drive signal to drive the imaging device and inputting the generated drive signal to the imaging device based on the timing signal, the phase of which has been delayed by the phase delay circuit. However, Matumoto teaches the use of a phase-variable sampling pulse generator for adjusting or changing the phase of the drive signal and input the drive signal of which the phase has been changed to the imaging device via the signal transmission line (see fig.1 and 3, note the disclosure of element 19, the phase-variable sampling pulse generator, in that the horizontal drive pulse,  $\Phi_H$ , or the reset pulse,  $\Phi_R$ , signals are inputted into element 31 of the phase-variable sampling pulse generator for processing the pulse width, then into element 32 for phase adjustment to be done over a transmission line). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Kaiya and Matumoto, as a whole, for effectively operating a correlated double sampling circuit or the like without changing the operation timing when it is used for electronic endoscopes having different lengths and minimizing circuitry requirements for saving costs (Matumoto col.2, ln.39-47).

***Allowable Subject Matter***

3. Claims 1, 2, 4, 5, 7, 9-16, 18 and 20-22 are allowed.
4. The following is a statement of reasons for the indication of allowable subject matter: The prior art does not specifically disclose the specific combination of limitations of claim 1: an endoscopic imaging system comprising: an endoscope having an insertion unit which is insertable into an object, the insertion unit having an illumination optical system for illuminating the object and an objective optical system for

forming an optical image of the illuminated object; an imaging apparatus having an imaging device for picking up the optical image and outputting an image pick-up signal; a camera control unit connected to the imaging apparatus, the camera control unit comprising a synchronizing signal generation circuit for generating a synchronizing signal, and a video signal processing circuit for processing the image pick-up signal at a predetermine timing based on the synchronizing signal, to generate a video signal; and a connector associated-with for connecting the imaging apparatus and the camera control unit, the connector being provided to the imaging apparatus and electrically connected to the imaging device via an elongate signal transmission line, the connector including: a timing signal generation circuit for generating a periodic timing signal according to the type of the imaging device; a sampling circuit for sampling the image pick-up signal at a predetermined sampling timing according to the timing signal, and outputting the sampled image pick-up signal to the video signal processing circuit; a phase delay circuit for delaying the phase of the timing signal by a delay amount according to the length of the signal transmission line; and an imaging device drive circuit for generating a drive signal to drive the imaging device and inputting the generated drive signal to the imaging device based on the timing signal, the phase of which has been delayed by the phase delay circuit. Claims 18 and 22 are patentable for similar reasons as claim 1.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (571) 272-7341.

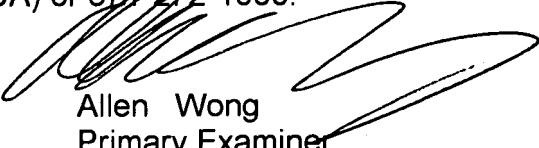
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The examiner can normally be reached on Mondays to Thursdays from 8am-6pm

Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Allen Wong  
Primary Examiner  
Art Unit 2621

AW  
8/20/07